Count leading zeros in a binary number.

ALGORITHM:

STEP 1: Start the program

STEP 2: Integer using number,count=0

STEP 3: Print enter a number and usung %d and num

STEP 4: And using while loop

STEP 5: Print Total number of leading zeros

STEP 6: Finally return 0

COMMAND:

printf("Enter any number: ");

scanf("%d", &num); // Input number from user

while(!(num & (~INT\_MAX))) // using while loop to small the program

PROGRAM:

#include <stdio.h>

#include <limits.h>

int main()

{

int num, count;

printf("Enter any number: ");

scanf("%d", &num);

count = 0;

while(!(num & (~INT\_MAX)))

{

count++;

num <<= 1;

}

printf("Total number of leading zeros = %d", count);

return 0;

}

OUTPUT:  
Enter any number: 48

Total number of leading zeros = 26